

REMARKS

The Office Action mailed November 3, 2006 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-11 are now pending in this application. Claims 1-11 stand rejected. Claim 1 has been amended. No new matter has been added.

An Information Disclosure Statement with Form PTO-1449 was filed in the above-captioned patent application on November 26, 2003. Applicants have not yet received from the Examiner a copy of the Form PTO-1449 initialed to acknowledge the fact that the Examiner has considered the disclosed information. The Examiner is requested to initial and return to the undersigned a copy of the Form PTO-1449 in the next Office Action.

The rejection of Claims 1, 2, 9, and 10 under 35 U.S.C. § 102(b) as being anticipated by Van Creveld et al. (U.S. Patent 5,810,733) ("Van Creveld") is respectfully traversed.

Van Creveld describes a transducer probe including a sub-assembly structure that includes a stack array (310) and a cable (320) attached to a structure (200). A casting process is used to form an acoustic lens (330) to place against a patient, and a handle portion (340) that encapsulates the structure (200), the stack array (310), and the cable (320). A prefabricated plastic case (370) is adhered to the handle portion (340) such that an opening is formed at one end of the case (370). Notably, the opening of the case (370) is covered by the handle portion (340), and thus not covered by the acoustic lens (330). Moreover, the acoustic lens (330) is a portion of a transceiver unit, and thus not a portion of an enclosure that encloses the unit. Further, the acoustic lens (33) is not enclosed by the handle portion (340) or the case (370).

Claim 1 recites an ultrasonic probe including "an ultrasonic transceiver unit; and an enclosure that encloses the unit, the enclosure comprising: a first partial enclosure formed of hard plastics having an opening at the tip; and a second partial enclosure integrally formed with the first partial enclosure so as to cover the opening to extend from the tip, the second

partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure.”

Van Creveld does not describe nor suggest an ultrasonic probe as recited in Claim 1. More specifically, Van Creveld does not describe nor suggest an ultrasonic probe including an enclosure that encloses an ultrasonic transceiver unit, and that includes a second partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure. Rather, in contrast to the present invention, Van Creveld describes a probe including a case adhered to a handle portion that encapsulates a sub-assembly of a transceiver unit.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Van Creveld.

Claims 2, 9, and 10 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2, 9, and 10 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2, 9, and 10 likewise are patentable over Van Creveld.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 2, 9, and 10 be withdrawn.

The rejection of Claims 4-8 and 11 under 35 U.S.C. § 103 as being unpatentable over Van Creveld in view of Silber et al. (U.S. Patent 5,928,154) (“Silber”) is respectfully traversed.

Van Creveld has been described above.

Silber describes an ultrasonic probe (100) including a larger casing (101) and a smaller nose (106) of that is coupled to an end of the casing (101). A transducer lens (not shown) is attached to an end of the nose (106) and is placed against a patient’s body. Notably, Silber does not describe or suggest that the nose (106) is integrally formed with the casing (101) so as to cover an opening at a tip of the casing (101). Moreover, Silber does not

describe or suggest that the nose (106) is formed of soft plastics (e.g., a thin film formed such that the attenuation of waves can be negligible in this part). Further, Silber does not describe or suggest that the lens is enclosed by the nose (106).

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Van Creveld nor Silber, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Van Creveld and Silber, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected in an attempt to arrive at the claimed

invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, neither Van Creveld nor Silber, considered alone or in combination, describe nor suggest the claimed invention. Specifically, Claim 1 recites an ultrasonic probe including “an ultrasonic transceiver unit; and an enclosure that encloses the unit, the enclosure comprising: a first partial enclosure formed of hard plastics having an opening at the tip; and a second partial enclosure integrally formed with the first partial enclosure so as to cover the opening to extend from the tip, the second partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure.”

Neither Van Creveld nor Silber, considered alone or in combination, describe or suggest an ultrasonic probe as recited in Claim 1. More specifically, neither Van Creveld nor Silber, considered alone or in combination, describe nor suggest an ultrasonic probe including an enclosure that encloses an ultrasonic transceiver unit, and that includes a second partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure. Rather, in contrast to the present invention, Van Creveld describes a probe including a case adhered to a handle portion that encapsulates a sub-assembly of a transceiver unit, and Silber describes a probe including a lens attached to a nose end of a probe.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Van Creveld in view of Silber.

Claims 4-8 and 11 depend directly from independent Claim 1. When the recitations of Claims 4-8 and 11 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 4-8 and 11 likewise are patentable over Van Creveld in view of Silber.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 4-8 and 11 be withdrawn.

The rejection of Claim 3 under 35 U.S.C. § 103 as being unpatentable over Van Creveld in view of Sudol et al ("Sudol") is respectfully traversed. The Office Action mistakenly identifies U.S. Patent 6,162,083 to Sudol. Therefore, Applicants respectfully traverse the rejection based on U.S. Patent 6,162,093 to Sudol as identified in form PTO-892 attached to the Office Action.

Van Creveld has been described above.

Sudol describes an ultrasound system (10) including an ultrasonic transducer (12) that is placed against a patient's body. The system (10) also includes a cable (16) that is coupled to connector assembly (18) to mate with a receptacle (20) defined within a console (14). Various connector assemblies (110), (150), (200), and (250) can be used to mate with a recess defined in a mating surface. Notably, Sudol does not describe or suggest the details of the ultrasonic transducer (12).

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Van Creveld nor Sudol, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Van Creveld and Sudol, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather,

there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, neither Van Creveld nor Sudol, considered alone or in combination, describe nor suggest the claimed invention. Specifically, Claim 1 recites an ultrasonic probe including "an ultrasonic transceiver unit; and an enclosure that encloses the unit, the enclosure comprising: a first partial enclosure formed of hard plastics having an opening at the tip; and a second partial enclosure integrally formed with the first partial enclosure so as to cover the opening to extend from the tip, the second partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure."

Neither Van Creveld nor Sudol, considered alone or in combination, describe or suggest an ultrasonic probe as recited in Claim 1. More specifically, neither Van Creveld nor Sudol, considered alone or in combination, describe nor suggest an ultrasonic probe including

an enclosure that encloses an ultrasonic transceiver unit, and that includes a second partial enclosure being formed of soft plastics and having a transmission/reception surface of the ultrasonic transceiver unit in contact therewith from inside the enclosure. Rather, in contrast to the present invention, Van Creveld describes a probe including a case adhered to a handle portion that encapsulates a sub-assembly of a transceiver unit, and Sudol describes various connector assemblies that connect a transducer to recess/mating surface of a console.

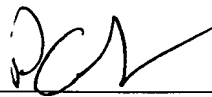
Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Van Creveld in view of Sudol.

Claim 3 depends directly from independent Claim 1. When the recitations of Claim 3 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 3 likewise is patentable over Van Creveld in view of Sudol.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 3 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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